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SEISAKUSHO:KK

(22)Date of filing:

11.12.1997

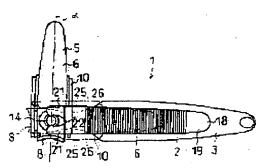
(72)Inventor: KOSAKA HARUO

(54) NAIL CLIPPER

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a nail clipper allowing a nail to be cut in a comfortable posture even in the case of fixing the nail clipper and the direction of the nail to the nail clipper in a desired position by movably providing a cutting member provided with a cutting edge.

SOLUTION: A nail clipper 1 is provided with a support body 2. A cutting member 5 is disposed in the support body 2. A cutting edge is formed at the front end of the cutting member 5, and the cutting edge side has elasticity in a mutually spaced direction. A supporting shaft 14 is inserted through the front end parts of the support body 2 and cutting member 5. A pressure operating lever 18 is rotatably supported on the front end part of the supporting shaft 14. The cutting member 5 is supported to the supporting shaft 14 so as to be rotatable clockwise and counterclockwise around the axis of the supporting shaft 14. At the time of using the nail clipper 1, a part of the cutting member 5 protruded from a cutout face 26 is pulled out.



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CLAIMS

[Claim(s)]

[Claim 1] Nail clippers characterized by providing the following Supporter material The member with an edge which was supported free [rocking] along with the predetermined flat surface to this supporter material, and was equipped with the 1st blade and the 2nd blade of each other free [opening and closing] Shank material inserted in this 1st blade so that it might be constructed between the 1st blade of the aforementioned member with an edge, and the 2nd blade and opening and closing of the 1st blade might be attained along the direction of an axial center The press operation lever which is connected free [rocking] on the line which intersects perpendicularly with the axial center to the aforementioned shank material, and presses the 1st blade of the above in the aforementioned axial center direction at the time of rocking

[Claim 2] The aforementioned members with an edge are nail clippers according to claim 1 characterized by being supported free [rocking] along with a predetermined flat surface to the aforementioned supporter material in the aforementioned shank

[Claim 3] The aforementioned members with an edge are nail clippers according to claim 1 characterized by being supported free [rocking] along with a predetermined flat surface through a connecting shaft to the aforementioned supporter material. [Claim 4] Supporter material is nail clippers according to claim 2 by which the member with an edge which consisted of an elastic plate of a vertical couple and was supported in the aforementioned shank material between the point is arranged. [Claim 5] The members with an edge are nail clippers according to claim 2 or 3 characterized by consisting of an elastic plate of a couple and connecting the end of each other.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to nail clippers. [0002]

[Description of the Prior Art] Nail clippers are known as a tool for turning off the presser foot stitch tongue of hands, such as people and an animal, or a leg from the former.

[0003] The conventional nail clippers 51 are shown in <u>drawing 12</u> and <u>drawing 13</u>. The aforementioned nail clippers 51 are equipped with the vertical double-edged sword objects 52 and 53. While the back end section of the aforementioned vertical double-edged sword objects 52 and 53 has fixed mutually, cutting edges 54 and 55 are formed in the front end, respectively.

[0004] it is shown in <u>drawing 13</u> — as — the front end section of the aforementioned vertical double-edged sword objects 52 and 53 — respectively — insertion — holes 56 and 57 are formed and the pivot 58 is inserted in free [rotation] While the head 59 formed in the soffit of the aforementioned pivot 58 is stopped by the inferior surface of tongue of the lower blade 53, the upper-limit section of a shank 60 is projected more nearly up than the upper surface of the upper blade 52. And the press operation lever 61 is attached free [rocking] on the line which intersects perpendicularly with the axial center of a pivot 58 at the upper-limit section of the shank 60 of the aforementioned pivot 58.

[0005] When turning off a presser foot stitch tongue using the above nail clippers 51, a presser foot stitch tongue is inserted between a cutting edge 54 and 55, and press operation of the press operation lever 61 is carried out. Moreover, what [not only] has turned to the front but the thing which has turned [method / the left or / of the right] to the direction 90 degrees has cutting edges 54 and 55 in the conventional nail clippers.

[0006]

[Problem(s) to be Solved by the Invention] However, in the conventional nail clippers, since cutting edges 54 and 55 were turned only in the specific direction, when cutting edges 54 and 55 had turned to the longitudinal direction of blades 52 and 53, and turning off a presser foot stitch tongue, with nail clippers fixed, the sense of the finger to cutting edges 54 and 55 needed to be changed.

[0007] Therefore, the finger to turn off a presser foot stitch tongue etc. needed to be held with the impossible posture, and there was a trouble that a finger to turn off a presser foot stitch tongue etc. got tired. Moreover, although that by which cutting edges 54 and 55 were turned to the left 90 degrees as opposed to the longitudinal direction of blades 52 and 53 was convenient for the right-handed man, the left-handed man also had the problem which is on the contrary hard to use it.

[0008] Then, by preparing free [movement of the member with an edge equipped

with the cutting edge], even if this invention fixes the sense of the presser foot stitch tongue to nail clippers and nail clippers in a favorite position, it aims at offering the nail clippers which can cut a presser foot stitch tongue by the easy posture.
[0009]

[Means for Solving the Problem] In order to solve the above-mentioned trouble in invention of a claim 1 Supporter material and the member with an edge which was supported free [rocking] along with the predetermined flat surface to this supporter material, and was equipped with the 1st blade and the 2nd blade of each other free [opening and closing]. The shank material inserted in this 1st blade so that it might be constructed between the 1st blade of the aforementioned member with an edge, and the 2nd blade and opening and closing of the 1st blade might be attained along the direction of an axial center, It is connected free [rocking] on the line which intersects perpendicularly with the axial center to the aforementioned shank material, and nail clippers equipped with the press operation lever which presses the 1st blade of the above in the aforementioned axial center direction at the time of rocking are made into the summary.

[0010] Invention of a claim 2 makes it the summary to have supported the aforementioned member with an edge free [rocking] along with the predetermined flat surface to the aforementioned supporter material in the aforementioned shank material in the claim 1.

[0011] Invention of a claim 3 makes it the summary to have supported the aforementioned member with an edge free [rocking] along with the predetermined flat surface through the connecting shaft to the aforementioned supporter material in the claim 1.

[0012] In the claim 2, supporter material consists of an elastic plate of a vertical couple, and invention of a claim 4 makes it the summary to arrange the member with an edge supported in the aforementioned shank material between the point. [0013] In the claim 2 or the claim 3, the member with an edge consists of an elastic plate of a couple, and invention of a claim 5 makes it the summary to connect the end of each other.

(Operation) In invention of a claim 1, the member with an edge is supported free [rocking] along with a predetermined flat surface to supporter material. And a presser foot stitch tongue is inserted between the 1st blade and the 2nd blade with which the member with an edge was equipped, and a presser foot stitch tongue is turned off by carrying out press operation of the press operation lever. At this time, the member with an edge can be set as arbitrary angles to a finger to turn off a presser foot stitch tongue.

[0014] In invention of a claim 2, the member with an edge is supported free [rocking] along with a predetermined flat surface to supporter material by shank material. In invention of a claim 3, the member with an edge is supported free [rocking] along with a predetermined flat surface through a connecting shaft to supporter material.

[0015] In invention of a claim 4, if press operation of the press operation lever is carried out, a press operation lever will press one elastic plate, and the elastic plate will press a member with an edge. In invention of a claim 5, when carrying out press operation of the press operation lever, the 1st blade and the 2nd blade resist the elastic force of the elastic plate of a couple, and are operated.

[0016]

[Embodiments of the Invention] (The 1st operation gestalt) The 1st operation gestalt which materialized this invention hereafter to the nail clippers used in order to turn off the presser foot stitch tongue of hands, such as people and an animal, or a leg is explained according to <u>drawing 1</u> - <u>drawing 6</u>:

[0017] The nail clippers 1 of this operation gestalt are shown in <u>drawing 1</u>. the cut as the base material 2 as supporter material of metal [nail clippers / aforementioned / 1], the pivot 14 as shank material, the press operation lever 18, and a member with an edge -- it has the member 5 The aforementioned base material 2 is constituted by the finish plate 3 and underplate 4 as an elastic plate. And while the back end section of both the boards 3 and 4 fixes mutually, the right-and-left both sides and anterior are opened wide.

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TECHNICAL FIELD

[The technical field to which invention belongs] this invention relates to nail clippers.

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PRIOR ART

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[0003] The conventional nail clippers 51 are shown in <u>drawing 12</u> and <u>drawing 13</u>. The aforementioned nail clippers 51 are equipped with the vertical double-edged sword objects 52 and 53. While the back end section of the aforementioned vertical double-edged sword objects 52 and 53 has fixed mutually, cutting edges 54 and 55 are formed in the front end, respectively.

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[0005] When turning off a presser foot stitch tongue using the above nail clippers 51, a presser foot stitch tongue is inserted between a cutting edge 54 and 55, and press operation of the press operation lever 61 is carried out. Moreover, what [not only] has turned to the front but the thing which has turned [method / the left or / of the right] to the direction 90 degrees has cutting edges 54 and 55 in the conventional nail clippers.

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EFFECT OF THE INVENTION

[Effect of the Invention] Since the member with an edge was supported free [rocking] along with the predetermined flat surface to supporter material according to invention according to claim 1 as explained in full detail above, it is not necessary to move a finger to turn off a presser foot stitch tongue to the 1st and 2nd blades, and a presser foot stitch tongue can be cut by the easy posture.

[0061] According to invention according to claim 2, since the member with an edge was supported free [rocking] along with the predetermined flat surface to supporter material in shank material, an effect of the invention according to claim 1 is done so. [0062] According to invention according to claim 3, since the member with an edge was supported free [rocking] along with the predetermined flat surface through the connecting shaft to supporter material, an effect of the invention according to claim 1 is done so.

[0063] According to invention according to claim 4, in addition to an effect of the invention according to claim 2, press operation of the press operation lever can be carried out, and when an upper elastic plate presses a member with an edge, a presser foot stitch tongue can be cut.

[0064] according to invention according to claim 5, since the end of the elastic plate of a couple was connected mutually in addition to the effect of the invention according to claim 2 or 3, it can prevent that the physical relationship of the 1st blade and the 2nd blade shifts at the time of opening and closing of a member with an edge

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, in the conventional nail clippers, since cutting edges 54 and 55 were turned only in the specific direction, when cutting edges 54 and 55 had turned to the longitudinal direction of blades 52 and 53, and turning off a presser foot stitch tongue, with nail clippers fixed, the sense of the finger to cutting edges 54 and 55 needed to be changed.

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MEANS

[Means for Solving the Problem] In order to solve the above-mentioned trouble in invention of a claim 1 Supporter material and the member with an edge which was supported free [rocking] along with the predetermined flat surface to this supporter material, and was equipped with the 1st blade and the 2nd blade of each other free [opening and closing]. The shank material inserted in this 1st blade so that it might be constructed between the 1st blade of the aforementioned member with an edge, and the 2nd blade and opening and closing of the 1st blade might be attained along the direction of an axial center, It is connected free [rocking] on the line which intersects perpendicularly with the axial center to the aforementioned shank material, and nail clippers equipped with the press operation lever which presses the 1st blade of the above in the aforementioned axial center direction at the time of rocking are made into the summary.

[0010] Invention of a claim 2 makes it the summary to have supported the aforementioned member with an edge free [rocking] along with the predetermined flat surface to the aforementioned supporter material in the aforementioned shank material in the claim 1.

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OPERATION

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[0014] In invention of a claim 2, the member with an edge is supported free [rocking] along with a predetermined flat surface to supporter material by shank material. In invention of a claim 3, the member with an edge is supported free [rocking] along with a predetermined flat surface through a connecting shaft to supporter material.

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[0016]

[Embodiments of the Invention] (The 1st operation gestalt) The 1st operation gestalt which materialized this invention hereafter to the nail clippers used in order to turn off the presser foot stitch tongue of hands, such as people and an animal, or a leg is explained according to drawing 1 - drawing 6

[0017] The nail clippers 1 of this operation gestalt are shown in drawing 1.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The side elevation at the time of use of the nail clippers of the 1st operation gestalt.

[Drawing 2] Similarly it is a side elevation at the time of un-using it.

[Drawing 3] the same -- a cut -- the plan showing the movement of a member

[Drawing 4] Similarly it is an important section cross section at the time of use.

[Drawing 5] The important section cross section showing the relation between a pivot and a press operation lever similarly.

[Drawing 6] the same -- a cut -- the plan showing the use range of a member

[Drawing 7] The side elevation at the time of un-using [of the nail clippers of the 2nd operation gestalt] it.

[Drawing 8] the same -- a cut -- the plan showing the movement of a member

[Drawing 9] Similarly it is an important section cross section.

[Drawing 10] Similarly it is an important section cross section at the time of use.

[Drawing 11] Similarly it is an important section cross section.

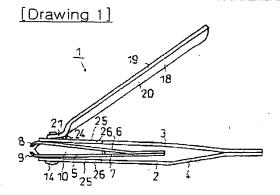
[Drawing 12] The side elevation at the time of use of the conventional nail clippers.

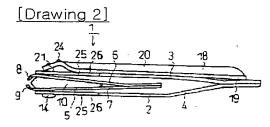
[Drawing 13] Similarly it is an important section cross section at the time of use. [Description of Notations]

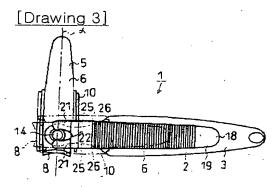
1 [-- The finish plate as an elastic plate,] -- Nail clippers, 2 -- The base material as supporter material, 3 4 [-- The 1st blade and the upper blade as an elastic plate, 7 / -- The 2nd blade and the lower blade as an elastic plate, 14 / -- The pivot as shank material, 18 / -- A press operation lever, 29 / -- Pivot as a connecting shaft.] -- The underplate as an elastic plate, 5 -- The cut member as a member with an edge, 6

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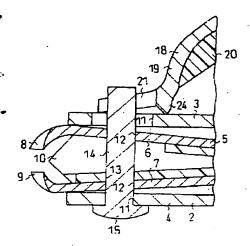
DRAWINGS



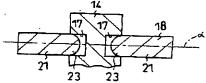




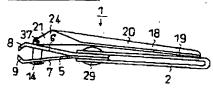
[Drawing 4]



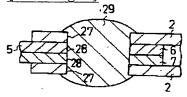




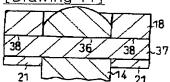
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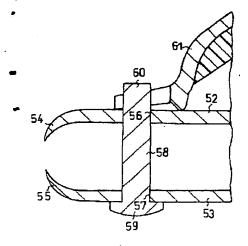
[Drawing 9]



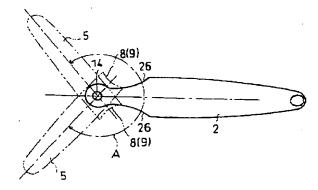
[Drawing 11]

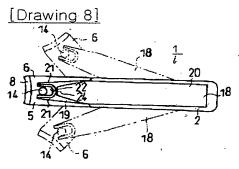


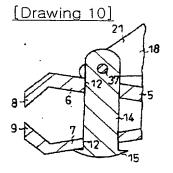
[Drawing 13]



[Drawing 6]







[Drawing 12]

